

Chapter 8

Making Agricultural Input Subsidies More Effective and Profitable in Africa: The Role of Complementary Interventions

Joseph S. Kanyamuka

Lilongwe University of Agriculture and Natural Resources, Malawi

Charles B. L. Jumbe

Lilongwe University of Agriculture and Natural Resources, Malawi

Jacob Ricker-Gilbert

Purdue University, USA

ABSTRACT

The combined effects of declining soil fertility, continuous mono-cropping, poor crop residues management, and limited resources are considered the major constraints to increased crop productivity in Sub-Saharan Africa. It is for this reason that most African governments in Sub-Saharan Africa have been implementing farm input support programmes to boost smallholder production. While substantial amounts of resources are committed to support such programmes, evidence suggests that the increased use of modern inputs such as inorganic fertilizers on the main staple food crops appear to be only marginally profitable or even unprofitable. There is a renewed realization that the use of fertilizer input alone to raise farm productivity is likely to be impeded, if sufficient attention is not given to complementary interventions such as integrated soil fertility management technologies and extension services. This chapter provides evidence from several African countries on the role of complementary interventions in enhancing profitability, effectiveness, and efficiency with which farm inputs such as inorganic fertilizer and improved seed are applied.

DOI: 10.4018/978-1-5225-3631-4.ch008

INTRODUCTION

The combined effects of declining soil fertility due to low and inappropriate fertilizer use and inappropriate crop residues management, coupled with limited resources are considered major constraints to increased crop productivity in Sub-Saharan Africa (SSA) (Ngwira et al., 2012 Mhango et al., 2012 and Vanlauwe, 2015). This has been exacerbated by soil nutrient mining through continuous cultivation of crops (mono-cropping), especially maize thereby leading to subsequent reduction in the productivity of soils. To address the declining soil fertility, most African governments (such as Malawi, Kenya, Tanzania, Zambia Mali, Nigeria, Ghana, Senegal, Ethiopia and others) have embarked on farm input support programs to provide farmers with subsidized inorganic fertilizers and improved seed with the goal of helping the farmers break out of a low input/low output trap (Denning et al. 2009; Sachs 2012 & Ricker-Gilbrt & Jayne, 2014).

However, one of the major ironies emanating from applied research is that the greater use of modern inputs such as inorganic fertilizer appears to be only marginally profitable or even unprofitable to use on the main staple food crops (such as maize) in the region. There is an increasing realization that fertilizer input intensification alone to raise farm productivity growth is likely to be impeded if adequate attention is not paid to complementary interventions (e.g. Liverpool-Tasie et al., 2016). In this regard, Dorward and Chirwa (2013) noted that increased production is crucial to the achievement of programme objectives that results from incremental use of inputs (which mainly comprises inorganic fertilizer and improved seeds) that leads to increased yields due to high yield responses to the inputs which is dependent upon weather and the efficiency of input use and of crop production.

Malawi has been a leader in pioneering agricultural input subsidy programmes (ISPs) after well-publicized initial reports about the success of the first targeted input voucher program in 2004/05 that saw at least nine other African governments following suit. Kenya joined the ranks of sub-Saharan African (SSA) countries implementing targeted input subsidy programmes for inorganic fertiliser and improved seed in 2007/08 through the establishment of the National Accelerated Agricultural Inputs Access Programme (NAAIAP).

While agricultural input subsidy programmes have been implemented to enable farmers access chemical fertilizers and improved seeds needed to boost crop production and enhance household and national food security (Holden and Lunduka, 2010, Mason, et al., 2017), such programmes are largely implemented using government resources that take up largest share of total agricultural national budgets. Jayne and Rashid (2013) observes that ten African governments spend roughly US\$1 billion every

14 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/making-agricultural-input-subsidies-more-effective-and-profitable-in-africa/200096

Related Content

A Study on Occupational Health and Safety Practices on Construction Site Workers for Finding Discomfort Level

Suchismita Satapathy (2023). *International Journal of Social Ecology and Sustainable Development* (pp. 1-15).

www.irma-international.org/article/a-study-on-occupational-health-and-safety-practices-on-construction-site-workers-for-finding-discomfort-level/326754

Circular Economy Principles and Their Influence on Attitudes to Consume Green Products in the Fashion Industry: A Study About Perceptions of Portuguese Students

Luisa Cagica Carvalho, Sandrina B. Moreira, Rui Dias, Susana Rodrigues and Berta Costa (2020). *Mapping, Managing, and Crafting Sustainable Business Strategies for the Circular Economy* (pp. 248-275).

www.irma-international.org/chapter/circular-economy-principles-and-their-influence-on-attitudes-to-consume-green-products-in-the-fashion-industry/257296

Strategic Management of Innovation Focusing on Confluence of Continuity and Change

J. S. A. Bhat, Sushil and P. K. Jain (2011). *International Journal of Green Computing* (pp. 106-126).

www.irma-international.org/article/strategic-management-innovation-focusing-confluence/61378

Empowering India: A Time-Series Perspective of Poverty and Gender Equality

Lishamol Tomy and Anagha K. (2026). *Sustainable Innovations in Statistics and Data Science* (pp. 109-134).

www.irma-international.org/chapter/empowering-india/401273

Mountain Tourism in Romania: Case Study Mountain Resort Predeal

Adrian Nicolae Ungureanu (2017). *International Journal of Sustainable Economies Management* (pp. 35-49).

www.irma-international.org/article/mountain-tourism-in-romania/182791